WHAT IS CLAIMED IS

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     1. A method of controlling a transmission power of a multicast signal that is transmitted from a base station to a plurality of mobile stations through a radio link, comprising the steps of:

     measuring a value of a received signal quality parameter of a

10 multicast signal received at the mobile stations;

     transmitting a parameter signal, indicating the received signal quality parameter value, from the mobile stations to the base station through the radio link;

     receiving the parameter signals from the mobile stations at the

15 base station through the radio link;

     determining a power control value of each of the mobile stations based on the received signal quality parameter values of the parameter signals received at the base station; and

     controlling the transmission power of the multicast signal,

20 sent to each of the mobile stations, based on the determined power control value.

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     2. The method according to claim 1, wherein, in said determining step, a minimum value of the received signal quality parameter values of the received parameter signals is determined as being the power control value.

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3. The method according to claim 1, wherein, in said determining step, the received signal quality parameter values are rearranged into a sequence of the parameter values in a predetermined order, and one of the parameter values in the

5   rearranged sequence that corresponds to a predetermined ratio of the entire mobile stations is determined as being the power control value.

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4. The method according to claim 1, wherein a reception power of the received multicast signal is measured as being the value of the received signal quality parameter in said measuring step.

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5. The method according to claim 1, wherein, in said measuring step, a carrier-to-cochannel interference C/I ratio of the

20   received multicast signal is measured, and a difference between the measured C/I ratio and a reference C/I ratio is measured as being the value of the received signal quality parameter.

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6. The method according to claim 1, wherein one of a bit error ratio, a packet error ratio and a slot error ratio of the received multicast signal is measured as being the value of the received

30   signal quality parameter in said measuring step.

7. The method according to claim 1, wherein one of an error-correction-bit number and a maximum likelihood value, obtained by decoding of the received multicast signal, is measured as being the value of the received signal quality parameter in said measuring step.

8. A base station which controls a transmission power of a multicast signal that is transmitted to a plurality of mobile stations through a radio link, comprising:

a receiver receiving parameter signals from the mobile stations through the radio link, each parameter signal indicating a value of a received signal quality parameter of the multicast signal received at one of the mobile station;

a determination unit determining a power control value of each of the mobile stations based on the received signal quality parameter values of the parameter signals received by the receiver; and

a transmission power controller controlling the transmission power of the multicast signal, sent to each of the mobile stations, based on the determined power control value.

9. The base station according to claim 8, wherein the determination unit determines a minimum value of the received signal quality parameter values of the received parameter signals as being the power control value.

10. The base station according to claim 8, wherein the determination unit rearranges the received signal quality parameter values into a sequence of the parameter values having a predetermined order, and determines one of the parameter values in the rearranged sequence that corresponds to a predetermined ratio of the entire mobile stations as being the power control value.

11. The base station according to claim 8, wherein each of the mobile stations measures a reception power of the received multicast signal as being the value of the received signal quality parameter.

12. The base station according to claim 8, wherein each of the mobile stations measures a carrier-to-cochannel interference C/I ratio of the received multicast signal, and measures a difference between the measured C/I ratio and a reference C/I ratio as being the value of the received signal quality parameter.

13. The base station according to claim 8, wherein each of the mobile stations measures one of a bit error ratio, a packet error ratio and a slot error ratio of the received multicast signal as being the value of the received signal quality parameter.

14. The base station according to claim 8, wherein each of the mobile stations measures one of an error-correction-bit number and a maximum likelihood value, obtained by decoding of the received multicast signal, as being the value of the received signal quality parameter.

15. A method of controlling a transmission power of a multicast signal that is transmitted from a base station to a plurality of mobile stations through a radio link, comprising the steps of:

transmitting the multicast signal to the mobile stations through the radio link;

receiving an automatic repeat request ARQ signal from each of the mobile stations at the base station through the radio link, wherein each of the mobile stations transmits the ARQ signal to the base station when an error in demodulation of a received multicast signal occurs;

detecting whether at least one of a plurality of ARQ signals from the mobile stations is received at the base station;

outputting a power control signal indicating a result of the ARQ-signal detection; and

controlling the transmission power of the multicast signal, sent to each of the mobile stations, based on the ARQ-signal detection result indicated by the power control signal.

16. The method according to claim 15, wherein, in said controlling step, the transmission power of the multicast signal is increased when at least one of the ARQ signals is received at the

base station, and the transmission power of the multicast signal is decreased when none of the ARQ signals is received at the base station.

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17. The method according to claim 15, wherein, in said detecting step, it is detected whether a ratio of the number of the received ARQ signals to the number of the mobile stations exceeds a predetermined ratio, and, in said controlling step, the transmission power of the multicast signal is increased when the ratio of the ARQ-signal number exceeds the predetermined ratio, and the transmission power of the multicast signal is decreased when the ratio of the ARQ-signal number does not exceed the predetermined ratio.

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18. A base station which controls a transmission power of a multicast signal that is transmitted to a plurality of mobile stations through a radio link, comprising:

a transmitter transmitting the multicast signal to the mobile stations through the radio link;

a receiver receiving an automatic repeat request ARQ signal from each of the mobile stations through the radio link, wherein each of the mobile stations transmits the ARQ signal to the base station when an error in demodulation of a received multicast signal occurs;

a signal counter unit detecting whether at least one of a plurality of ARQ signals from the mobile stations is received by the receiver, and outputting a power control signal indicating a result of

the ARQ-signal detection; and

a transmission power controller controlling the transmission power of the multicast signal, sent to each of the mobile stations, based on the ARQ-signal detection result indicated by the power control signal of the signal counter unit.

19. The base station according to claim 18, wherein the transmission power controller is configured to increase the transmission power of the multicast signal when at least one of the ARQ signals is received by the receiver, and to decrease the transmission power of the multicast signal when none of the ARQ signals is received by the receiver.

20. The base station according to claim 18, wherein the signal counter unit is configured to detect whether a ratio of the number of the received ARQ signals to the number of the mobile stations exceeds a predetermined ratio, and wherein the transmission power controller is configured to increase the transmission power of the multicast signal when the ratio of the ARQ-signal number exceeds the predetermined ratio, and to decrease the transmission power of the multicast signal when the ratio of the ARQ-signal number does not exceed the predetermined ratio.